

Process for Producing Lumber Type Product from Carpet

Abstract of the Disclosure

A process for producing a lumber type product from scrap carpet, includes the steps of shredding the scrap carpet, grinding the shredded carpet in a plurality of grinding stages, and heating the grinded carpet in a plurality of heating stages. Each succeeding heating stage heats the grinded carpet to a higher predetermined temperature range. In a preferred process, the plurality of grinding stages comprises a first grinding stage and a second grinding stage and the plurality of heating stages comprises at least three heating stages, preferably five. In a process according, in a preferred arrangement, grinding the shredded carpet includes grinding the shredded carpet to pass through a one half inch screen and grinding the carpet a second time to pass through a screen of from about one fourth inch to about three eighths inch. In a preferred process according to the present invention, the first predetermined temperature range is from about 205 to about 255 degrees Fahrenheit, the second predetermined temperature range is from about 275 to about 310 degrees Fahrenheit, the third temperature range is from about 340 to about 385 degrees Fahrenheit, the fourth predetermined temperature range is from about 395 to about 435 degrees Fahrenheit, and the fifth predetermined temperature range is from about 430 to about 465 degrees Fahrenheit. In a preferred range of temperatures, the first predetermined temperature range is from about 225 to about 245 degrees Fahrenheit, the second predetermined temperature range is from about 285 to about 305 degrees Fahrenheit, the third temperature range is from about 360 to about 380 degrees Fahrenheit, the fourth predetermined temperature range is from about 405 to about 425 degrees Fahrenheit, and the fifth predetermined temperature range is from about 435 to about 455 degrees Fahrenheit. After the carpet has been substantially melted from heating, further steps include extruding the melted carpet into a mold and cooling the mold and the extruded melted carpet. Cooling the mold and the extruded melted carpet includes placing the mold into water and circulating the water.